

IV.—*A Reminiscence of the last great flight of the Passenger Pigeon (Ectopistes migratorius) in Canada.* By PERCY R. LOWE, from information derived from Dr. A. B. WELFORD of Woodstock, Ontario, Canada.

ON one of the hot days of last July there walked into the Bird-room of the British Museum a gentleman from Woodstock, Ontario, in Canada. This was Doctor A. B. Welford, who had not been to England for forty years, and in his hand he bore a fine skin of a Passenger Pigeon which he wished to present to the Museum. Almost at the last moment of leaving his home for England, he had packed it in one of his trunks—a happy thought,—for although it had been well preserved in his house as a precious relic of one of the most remarkable phenomena in the history of birds and was in fact, in a very excellent state of preservation, such relics are perhaps safer in an institution like the British Museum. Gratefully as we accepted Dr. Welford's gift, we were still more grateful for the very interesting account which the donor gave us of his own personal experience of the last great flight of the Passenger Pigeon. It must be getting a rare event, nowadays, to listen to the story of a man who had actually witnessed one of the last devastating flights of this remarkable bird, and as we listened, wholly absorbed, I came to the conclusion that such a story was too good to be lost in the hazy limbo of mere hearsay recollection. I therefore asked Dr. Welford if he would kindly jot down for publication a few notes as to the main facts and incidents of his experience, and here they are, woven into what I think is a story which may well interest the readers of 'The Ibis.'

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“The Passenger Pigeon which I have presented to the British Museum of Natural History was shot by me in the spring-flight (April) of 1870 (about), near Woodstock in Ontario. I am not absolutely clear as to the year or

month, but I feel fairly sure that it was April. I remember too, that it was a Monday, for there had been a large flight on the preceding day, and I can well recollect regretting that it was a Sunday, as we had up till then never seen such an unusual flight; although, as it turned out, this was only the advance guard.

For many years previously there had of course taken place the usual spring-flights from the south, but no one in those days remembered ever having seen anything comparable to the prodigious flight which occurred in the spring of 1869 or 1870. In previous years, if we had a bag of eight or ten a day it was considered good shooting, unless indeed one had had the fortune to be quietly lying in wait in the wood when a large flock alighted in one's immediate neighbourhood. On such a lucky occasion the flock would always first alight in the trees, and the birds would commence their sweet plaintive calls, which were very similar to those of the domestic pigeon but with a very much prettier trill and accentuation, and a curious ventriloquial effect. After calling in this way for some time, a few birds, emboldened by the apparent peace and safety, would fly down to the ground, quickly followed by more and more, until hundreds or the entire flock would soon be searching for the beech-nuts on or under the fallen leaves. It was, as I have said, on these fortunate occasions that one might get fifteen to twenty-five birds with a double shot just as they rose *en masse* from the ground, but as a rule I was quite content with ten birds in a day's shooting, and sometimes got none. Moreover, in the years previous to the big flight, the pigeons used to be very shy and difficult to approach, for usually the trees and undergrowth had not begun to put forth their leaves, and the birds, like wild geese, seemed to have a habit of putting out sentinels, so that when these flew away the entire flock would be off.

On the particular Monday of which I write the birds came over in incredible numbers, some idea of which may be gained by what happened to me personally.

I was up that morning very early, and so were the birds. I had taken up a position on the top of some rising ground, behind a rail or small fence which ran along the edge of a wood in which were growing some beech trees which supplied the favourite food of the pigeons. The beech-nuts had been lying covered with snow all through the winter, but were now exposed. Between the spot where I stood and another large wood was a small open clearing or meadow. By this time the air was black with flock upon flock of pigeons all going eastward. Some were flying high, but others just cleared the wood in front of me, and then swooping down to the meadow, flew very close to the ground, so close indeed that it was necessary for them to rise before clearing the low fence in front of me. This was my opportunity: and as they cleared the fence, so I fired into wave upon wave.

They came on in such numbers that thousands would pass between the discharge of my double-barrelled gun and its reloading—a longer process then, in the days of muzzle-loaders, than now. At about 10 A.M., not being in the least prepared for such phenomenal slaughter, I ran out of powder and shot, having then 400 birds to my credit, during the shooting of which it was not unusual to get from 15 to 25 with a “right and left.” Being now unable to do any more shooting until I had secured more ammunition I hurried home, a distance of $1\frac{1}{2}$ miles, got a horse and light waggon, returned to the scene of my battue with some grain-bags holding one and a half bushels of ordinary grain, filled them with the pigeons and made tracks for my home again. All the time I was filling the sacks the birds were still streaming low over the fence, so that before leaving I hid myself behind it, and taking a long slender cedar rail knocked down many more as they came over.

This, however, to my then youthful notions, did not appeal so much as shooting, so that, after dropping my birds at home, I drove into town (Woodstock, Ontario) for more powder and shot and caps, a distance of $3\frac{1}{2}$ miles. During

the entire drive there and back, flocks of millions of pigeons were filling the air and shadowing the sun like clouds. The roar of their wings resembled low rumbling thunder, and the shooting from scores of guns could be heard for miles resounding from wood to wood like a small mimic battle.

This great flight continued from before daylight to dusk and lasted for some days, gradually lessening until the flight was over.

Each succeeding year for several years ordinary flights continued, but in greatly reduced numbers, until they ceased altogether."

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Such in substance and fact is Dr. Welford's written statement, and his account of this wonderful flight corresponds in every essential particular with the story which he told on the spur of the moment to Mr. Kinnear and myself. What, we may well ask, is the explanation of this swift and tumultuous passing of the Passenger Pigeon, of this final orgy or riot of reproductive energy?

We may think of something akin to an abnormal stimulation or feverish exhaustion of the germ plasm, but how that over-stimulation arose, if it ever existed, it would be difficult to say. There seems, for instance, no evidence to suggest that it was due to an abnormal supply of food, and if it had been it would have affected other species of the family. We may fancifully compare it to the last flaring up of the dying spark of life in a race which was already doomed and approaching its end, or to a final and resplendent *finale* to the original creative impulse with which the species was launched from the "family tree" to run its inevitable course upon the face of the earth. We may think of it as a race whose germ-potency had, so to speak, "outrun the constable," like so many other races we have knowledge of in past geological ages; but instead of running to fantastic sizes, as in the case of so many of the reptiles whose doom was sealed,

it rioted in a spendthrift revelry of numbers, which led to exhaustion and extinction. We may, if it so pleases us, surmise that its vital mechanism had, for some cause or other, simply burnt itself out, or that there was some sudden alteration in the sex-ratio; but whatever we choose to think, there are I believe two causes at least for which there would appear to be a very justifiable doubt as to their being the actual determining factors leading to the total and final disappearance of the Passenger Pigeon from this planet. One of them is a microbic infection, the other the machinations of man, wholesale as the latter were. If it had been the first, there would have been abundant and patent evidence available, and as to the second the probabilities seem all against such an idea; for if the Passenger Pigeon had not, for some reason which we cannot yet fathom, been doomed to disappear utterly and finally, we should surely have witnessed small scattered populations still holding out in such places where chance and protection afforded them the opportunity.

Doubtless there will be not a few who will dissent. It will be pointed out that the Passenger Pigeon was a food-migrant, that it did not continue in one place, thereby militating against its preservation in specially protected areas. But its migrations were the result of its immense herds and consequent scarcity of food in any one locality, and we can scarcely believe that a small colony amply provided with a sufficiency of beech-nuts, acorns, and other provender would have left their breeding-grounds for the mere lust of wandering. Other objections, too, may be advanced, such as the facilities, especially in former times in the States, for indiscriminate shooting, just when the fate of the species was apparently trembling in the balance. Yet in spite of all such objections, in spite of the untold slaughter of thousands upon thousands by every means, legal and illegal, I still imagine we have not yet fathomed the secret of this pigeon's complete extermination.